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BRANCH (6SF-1)

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July 14, 2008

Ms. LaDonna Turner  
Site Assessment Manager  
U. S. EPA Region 6 (6SF-TR)  
Technical and Enforcement Branch  
Superfund Division  
1445 Ross Ave. Suite 1200  
Dallas, Texas 75202

**RE:** Transmittal of Preliminary Reassessment report for the Anaconda Company Bluewater uranium millsite (CERCLIS ID NMD007106891), Cibola County, New Mexico

Dear LaDonna:

The New Mexico Environment Department ("NMED") Superfund Oversight Section ("SOS") herein submits a Preliminary Reassessment Report for the Anaconda Company Bluewater uranium millsite. This 3300-acre millsite is one of 4 legacy uranium millsites among the San Mateo Creek legacy uranium sites (CERCLIS ID NMN00060684). Anaconda, which was succeeded by the Atlantic Richfield Company ("ARCO"), operated uranium milling operations on this site between 1953 and 1982. The U.S. Environmental Protection Agency completed a Potential Hazardous Waste Site Identification and Preliminary Assessment on August 31, 1981. The Site is under the jurisdiction of Title II of the Uranium Mill Tailing Radiation Control Act ("UMTRCA").

Leakage from onsite tailings ponds and from operation of a deep injection well between 1960 and 1977 contaminated the basalt, alluvial, San Andres, and Glorieta aquifers with mobile ions such as sulfate and chloride, and with molybdenum, selenium, and uranium. Ground water nitrate contamination from usage of ammonium nitrate in early operational processes also is referenced in site-related documentation. Other potential onsite contaminants that have been documented include thorium, radium, polychlorinated biphenols, asbestos, sulfuric and hydrochloric acids, aluminum, iron, manganese, calcium, magnesium, sodium, and Decanol (a mixture of amine and kerosene). The Nuclear Regulatory Commission ("NRC") approved ARCO's application for alternate concentration limits ("ACLs") in 1996 after several years of remedial pumping that produced no significant reduction in contaminant concentrations. The U.S. Department of Energy ("DOE") assumed title of the Site for long-term custody under UMTRCA in 1997.

Upgradient concentrations of contaminants of concern for ongoing ground water remediation at the Homestake Mining Company uranium millsite (CERCLIS ID NMD007860935) in the Alluvial and San Andres aquifers exceed federal drinking water standards. Ground water flow both in the karstic San Andres aquifer, and locally in the Alluvial aquifer, flows from the direction of the Site; contamination of the San Andres aquifer has not been attributed to the Homestake site. The San Andres aquifer is the source of drinking water for over 10,000 residents in the nearby communities of Bluewater, Grants, and Milan. SOS collected split samples from 7 point of compliance alluvial and San Andres aquifer monitor wells during routine site sampling that is conducted by the DOE under its Site long-term surveillance plan. Results from this split sampling indicated no exceedances of site ACLs. One alluvial aquifer monitor well had a total uranium concentration that exceeds the federal uranium maximum concentration limit ("MCL") and was more than 40 times the total uranium concentration that was documented in Site background well

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E(M). Other exceedances of secondary MCLs also were recorded among samples from these monitor wells. SOS notes that DOE documentation for the San Andres monitor wells indicates that screen intervals for some wells are either unknown or extend over 100 feet in length. Moreover DOE's documentation for some monitor wells is discrepant with information available from the New Mexico Office of the State Engineer.

SOS recommends further investigation of this Site under CERCLA to better characterize observed contaminant releases from this site, especially in the regional San Andres aquifer. SOS has developed a sampling and analysis plan for this characterization, results for which will be submitted to EPA as a Site Investigation report.

Please contact me at (505) 827-2908 if you have any questions.

Sincerely,



Dana Bahar  
Manager  
Superfund Oversight Section

Enclosure: Preliminary Reassessment report—The Anaconda Company Bluewater uranium millsite  
(CERCLIS ID NMD007106891), Cibola County, New Mexico

Copies w/o enclosure:

Kathy Gibson, U.S. EPA Region 6 Superfund State Coordinator  
David L. Mayerson, NMED SOS  
Janet Silva, Manager, Grants and Planning Section

Grants uranium belt 2008 correspondence file  
NMED/GWQB/SOS July 2008 read file